# MONTHLY WEATHER REVIEW.

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The MONTHLY WEATHER REVIEW summarizes the current manuscript data received from about 3,500 land stations in the United States and about 1,250 ocean vessels; it also gives the general results of the study of daily weather maps based on telegrams or cablegrams from about 200 North American and 40 European, Asiatic, and oceanic stations.

The hearty interest shown by all observers and correspondents is gratefully recognized.

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As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea level and latitude 45°.

## FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

During the first two days of April a barometric depression advanced from the central valleys of the United States over the Canadian Maritime Provinces, attended by general precipitation east of the Rocky Mountains, by snow over northern districts, and by high winds on the Great Lakes and along the middle Atlantic and New England coasts. The passage of this depression over the north Atlantic Ocean was attended by whole gales. It reached Iceland on the 6th, and moved thence over European Russia during the succeeding five days. Following the depression an area of high barometer and a cold wave swept from British America to the Atlantic coast, with zero temperature in Montana on the 1st, freezing temperature to the southern line of Tennessee on the 3d, and frost in the interior of the South Atlantic States on the 4th.

The second barometric disturbance of the month appeared on the north Pacific coast on the 3d and moved rapidly eastward, attended by rain generally in the central valleys and thence to the Atlantic coast. This disturbance inaugurated over the eastern portion of the United States a period of showery weather and mild temperature that was indicated by the general pressure distribution noted under this head for the closing days of March.

The third disturbance of the month appeared over the southwestern portion of the United States on the 5th and drifted slowly eastward over the southern Plateau and Rocky Mountain districts during the succeeding two days, attended by an extensive area of precipitation. By the morning of the 8th an offshoot from this disturbance had reached Lake Huron and the rain area had advanced to the Atlantic coast. At this time a trough of low pressure extended from eastern Ontario to Texas and thence to the middle Plateau, and snow was falling from the Lake region over the Dakotas and also in Wyoming and eastern Colorado. Moving eastward from Lake Huron, with increasing strength, the storm center reached Nova Scotia the morning of the 9th. During the 9th and 10th the main depression, attended by an extensive rain area, with snow over the upper Lakes, covered the eastern half of the country, and an area of high barometer extended from the north Pacific coast over the middle and northern Rocky Mountain and Plateau regions. The center of this depression past eastward over the North Atlantic States and during the night of the 11th the barometer fell to a reported reading of 28.84 inches at Sydney, C. B. L, with strong gales on the northern coasts. The advance of the western high area was attended during the 12th and 13th by fair and cool weather over middle and eastern districts.

In the Asiatic area a rapid fall in the barometer was shown on the 7th and a decided rise in pressure had occurred over continental Europe. The American storm that reached Iceland on the 6th was deflected southeastward over western Europe and apparently reached the Black Sea, or united with a depression that appeared over southern Europe, where the barometer continued low until the 12th.

On the 13th a sharp fall in the barometer occurred over eastern Siberia, and the depression there indicated advanced over the Pacific to Bering Sea by the 15th.

From the 12th to 15th a rain area advanced from the west Gulf States to the lower Missouri and middle Mississippi valleys and thence to the Atlantic coast, the rainfall from the west Gulf districts over the lower Ohio Valley being heavy. The barometric depression that caused this rain was attended on the 15th by high winds on the Great Lakes and middle and north Atlantic coasts, and was followed by a cool wave that carried the line of freezing temperature to Pennsylvania and caused snow in the upper Lake region and the interior of New York and New England.

The southwestern depression that past eastward over the Canadian Maritime Provinces on the 15th was deflected southeastward by the high barometric area that covered Iceland and northwestern Europe, and during the 17th past near and north of the Azores, and united by the 18th with the low barometric area that appeared over southwestern Europe on the 14th.